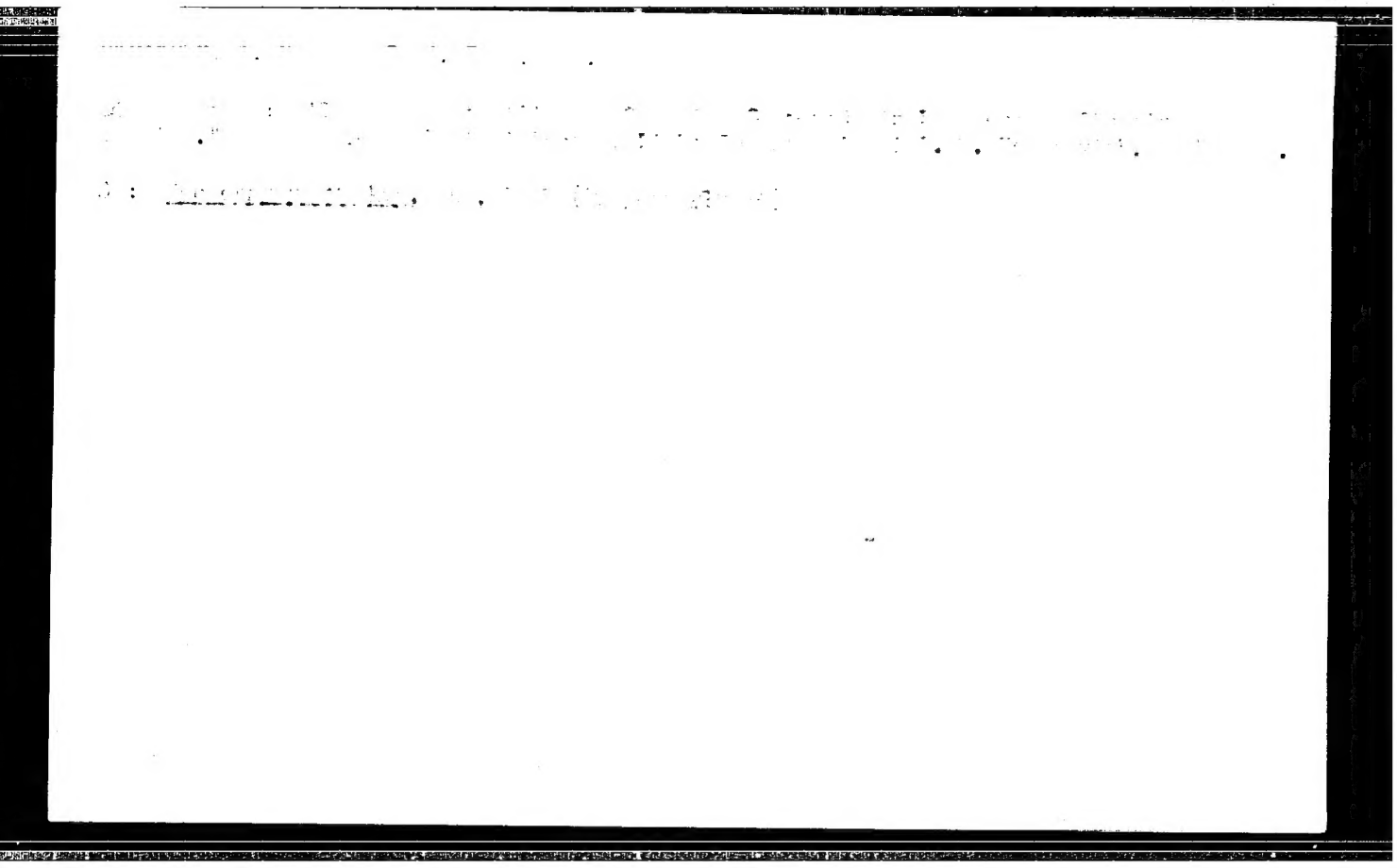
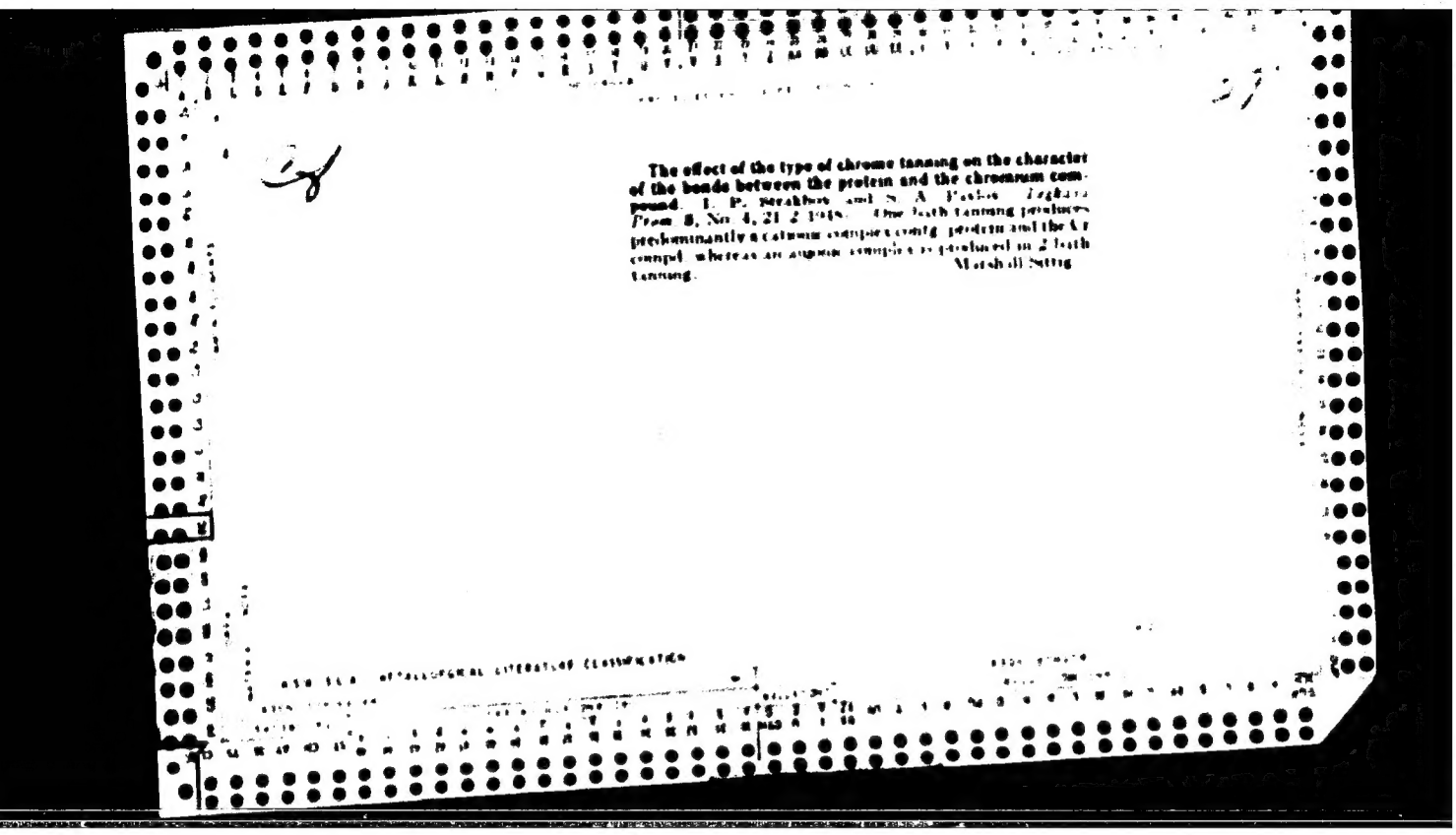
STRAKOV, I.

Economic inefficiency of the grassland crop rotation system of agriculture. Vop. ekon. no.2:30-36 F '62. (MIRA 15:1)
(Rotation of crops)

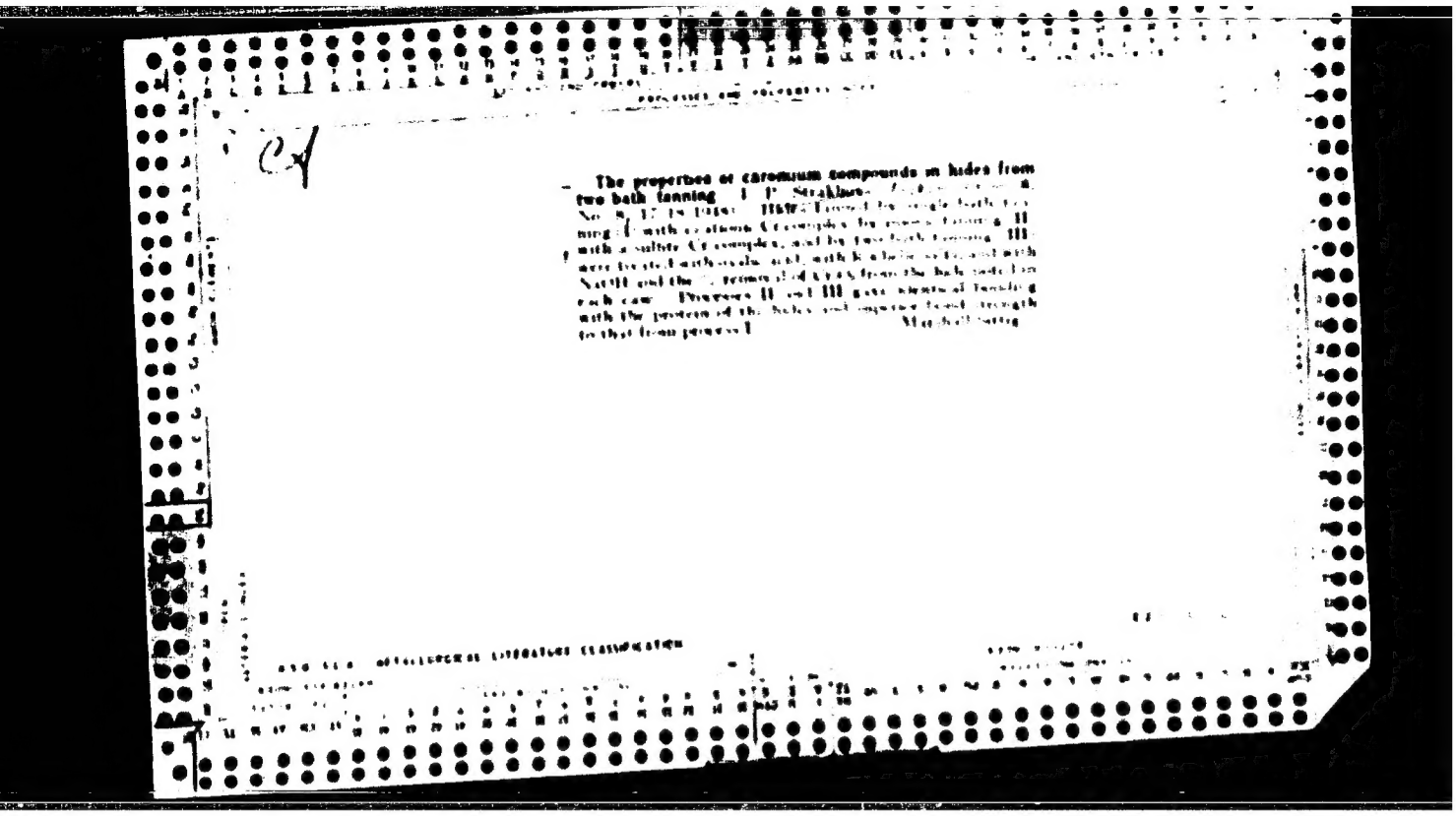


*STRAKHOV, I. P.

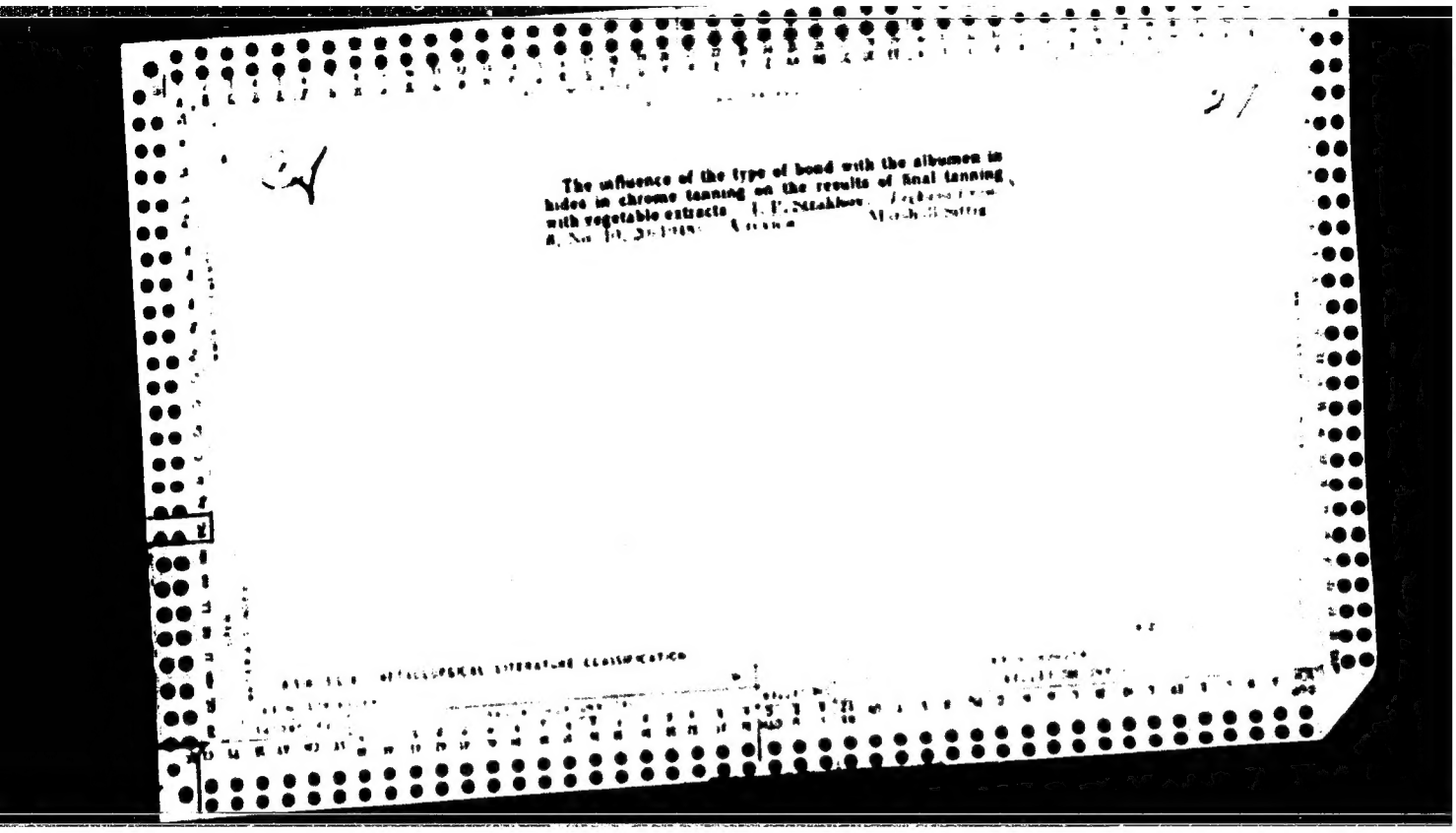
"The Influence of Chrome-Tanning Methods on the Characteristics of Albumin Combined with Chrome Compounds," Leg. Prom., 7, No. 4, 1948.



The effect of the type of chrome tanning on the character of the bonds between the protein and the chromium compound. [illegible] Trans. From S, No. 4, 21-2 [illegible] The both tanning produces predominantly a cationic complex using protein and the Cr compd. whereas an anionic complex is produced in 2 bath tanning. Marshall Sittig



The properties of chromium compounds on hides from two bath tanning



The influence of the type of bond with the albumen in hides in chrome tanning on the results of final tanning with vegetable extracts

-7

CA

Influence of cationic and anionic coördination compounds of chromium on the properties of albumins. I. P. Strakhov (Technol. Inst. Light Ind., Moscow). *J. Applied Chem. U.S.S.R.* 23, 141-7(1950)(Eng. translation).—See *C.A.* 45, 1351c. Cr complexes were prepd. from K₂Cr₂O₇ by reduction with glucose, SO₂, powdered sawdust, cotton waste, sulfite-cellulose ext., and vegetable tanning waste; the charge on the complex ion, the basicity no., and the turbidity no. were detd. for the resulting soln. of Cr complex. Gelatin tanned with Cr liquors contg. complex Cr cations had higher m. p. and greater strength than when liquors contained complex Cr anions; with leather the former liquors gave higher shrinkage temp. and smaller shrinkage. M. M. Mosen

1951

C.A.

The character of the reaction of chromium complexes with the most important groups of the proteins. I. P. Strakhov. (Light Ind. Technol. Inst., Moscow). *Zhur. Prikladnoi Khim. (J. Applied Chem.)* 24, 142-7(1951).—Spectra of collagen (I), silk fibroin (II), and polyamide fibers (polycaprolactam polymer) (III), were subjected to the action of chrome baths: (*A*) $CrCl_3$ + NaOH (33.78% basicity), (*B*) $Cr_2(SO_4)_3$ + NaOH (36.12% basicity), and (*C*) $Cr(OH)_3$ + H_2SO_4 + NaOH (32.5% basicity), after preliminary H_2O treatment for 14 hrs. The Cr treatment lasted 96 hrs. at 27° with daily stirring. III retained its initial color and retained no Cr within the fibers, but I and II did bind Cr depending on the nature of the bath. I bound Cr better from soln. *B* than from *A* (1.7 times). II binds Cr 1.5 times more readily from soln. *C* than from *A*. I retains 4-5 times more Cr than does II, when *A* soln. is used, and 5-6 times more when soln. *C* is used. The highest level of Cr is attained, however, from soln. *B*. If III is swelled by aq. PhOH soln. for 0.5 hrs. and then treated with soln. *A*, *B*, or *C*, the results are again neg. Treatment of I with CH_2O decreases Cr uptake from soln. *A* by about 4%, from soln. *B* by 40%, and from soln. *C* by 20%. Low uptake by II appears to be caused by smaller no. of NH_2 and COOH groups in the side chains, and the results obtained with CH_2O treatment of I indicate that the first reaction with Cr in cationic form takes place at CO_2H groups, while anionic Cr reacts with the NH_2 groups.

G. M. Kosolapoff

CA

11A

The nature of the reaction of chromium complexes with the principal groups in protein. I. P. Strakhov. *J. Applied Chem. U.S.S.R.* 24, 159-64(1951)(Engl. translation). See *C.A.* 46, 10816. R. M.

STRAKHOV, Ivan Pavlovich

Academic degree of Doctor of Technical Sci based on his defense, 3 July 1954, in the Council of the Moscow Technological Inst of Light Industry imeni Kaganovich, of his dissertation entitled: "Research into the interaction of tanning compounds of chrome and collagen".

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no 6, 19 Mar 55, Byulleten' MVO SSSR, No. 14, July 56 Moscow pp 4-22, Uncl. JPRS/NY-429

Effect of changes in tanning compounds of chromium on their fixation by collagen. I. P. Strakhov. *Legkaya Prom.* 14, No. 12, 26 (1954).—During tanning changes of Cr complex ions take place. The changes produce, in general, more stable complex ions of Cr, thus preventing the entry of anions like SO_4^{--} into their coordination spheres and [illegible] their reaction with the products of hydrolysis of collagen. Hence, the changes of complex ions of Cr have a slowing down effect on the absorption of Cr complexes and their reaction with collagen. In the tanning process the [illegible] and fixation of Cr complexes, when the tanning liquors are highly basic, are sometimes slowed down considerably. NaOH changes Cr complex ions into very stable ones. For example, violet crystals of $Na_3(C_2O_4)_3Cr(OH_2)_3$ are changed by NaOH into $Na\left[(C_2O_4)_2Cr\begin{matrix}OH\\OH_2\end{matrix}\right]$, which, on heating in soln. on a water bath for 40 min., [illegible] $Na_2\left[\ldots Cr \begin{matrix}OH\\HO\end{matrix} Cr(C_2O_4)_2\right]$. The structure of the latter [illegible] coordination sphere [illegible] only OH and C_2O_4 groups [illegible]

P. C. [illegible]

AID P - 3583

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 20/20

Author : Strakhov, I. P.

Title : Mikhaylov, A. N. Khimiya dubyashchikh veshchestv i protsessov dubleniya (Chemistry of tanning materials and tanning processes). 1953. (Book review)

Periodical : Zhur. prikl. khim., 28, 7, 783-784, 1955

Abstract : A critical review.

Institution : None

Submitted : No date

USSR Chemical Technology. Chemical Products and their Appli- I-31
[illegible] Leather. Fur. Gelatin. Tanning Agents.
Pt. 1 of 2 Pts.

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10512

Author : Sankin, L.B., and Strakhov, I.P.
Inst : Not given
Title : The Combined Chrome and Alum Tanning of Skins.

Orig Pub : Legkaya prom-st, 1956, No 6, 19-21

Abstract : Stable compounds of Al and Cr can be prepared by the combination of tanning liquors containing Al and Cr compounds. The strength of the adhesion of tanning substances containing Al and Cr in the ratio of 1 : 1, calculated as the oxides, to the collagen has been investigated. The greatest degree of fixation of Al and Cr compounds has been observed in specimens tanned in the presence of additions of sodium formate. The prolonged tumbling in water of hides which

Card : 1/2

USSR - Chemical Technology. Chemical Products and Their Application. Leather. Fur. Gelatin. Tanning Agents. Technical Proteins. I-31

Abs Jour Ref Zhur - Khimiya, No 3, 1957, No 10512

Abstract have been combination tanned with Cr and Al salts has shown that the washing resistance of Al salts is increased compared to that of pure Al tanning, the loss being reduced from 85.5% to 10-20%; these results indicate that mixed polynuclear complexes are formed in which a stable combination of Al and Cr takes place. A method is proposed for the preparation of chrome-alum tanning liquors by the addition of Al salts to a solution of potassium dichromate in acid medium, followed by reduction of the Cr. The method permits the utilization of Al salts on a large scale for tanning purposes and a realization of savings in the consumption of Cr salts for such purposes.

Card

CHERNOV, Nikolay Vladimirovich, prof.; ARONINA, Yu.N., dots.; GAYDAROV, L.P., dots.; STRAKHOV, I.P., prof.; SHESTAKOVA, I.S., prof.; KOTOV, M.P., prof., retsenzent; MIKHAYLOV, A.N., prof., retsenzent; RAZUMOVSKAYA, Ye.V., red.; KNAKNIN, M.T., tekhn.red.

[Chemistry of the leather and fur industries] Khimiia kozhevennogo i mekhovogo proizvodstva. Pod obshchei red. N.V.Chernova. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po legkoi promyshl., 1957. 456 p. (MIRA 11:3)
(Fur) (Chemistry, Technical)
(Leather industry)

Onset of Photo-e.m.f. in Layers of Lead Sulphide. E. Ya. Beringa, M. A. Rumsh & I. P. Strakhov. (Radiotekhnika i Elektronika, March 1957, Vol. 2, No. 3, pp. 287-290.) Electron diffraction patterns and the microscopic examination of vapour-deposited layers of PbS show the existence of needle-shaped protuberances. The relation of needle orientation to photo-electric characteristics is examined.

[illegible], M.A., inzhener; [illegible], L.I., professor.

Studying the tanning properties of dry chrome extracts. Leg.prom. 17 no.6:27-29 Je '57. (MLRA 10:8)
(Tanning materials)

STRAKHOV, I.P., doktor tekhn. nauk, prof.; MIKHAYLOV, A.N., doktor tekhn. nauk, prof.

At the 5th International Congress of Chemists and Leather Specialists. Leg. prom. 18 no.1:54-56 Ja '58. (MIRA 11:2)
(Rome--Leather industry--Congresses)

STRAKHOV, I.P., prof.; MEDVEDEVA, L., uchenyy sekretar'

Decision of the Council of the Moscow Technological Institute of the Light Industry on the manual "Planning in enterprises of the light industry" by P.S.Pushkin of September 23, 1958. Leg.prom. 18 no.11:49-50 N '58. (MIRA 11:12)

1. Zamestitel' predsedatelya Soveta Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti (for Strakhov).
(Industrial management--Handbooks, manuals, etc.)

CHERNOV, Nikolay Vladimirovich; ARONINA, Yuliya Naumovna; GAYDAROV, Leonid Petrovich; GOLOVTEYEVA, Alevtina Alekseyevna; STRAKHOV, Ivan Pavlovich; SHESTAKOVA, Irina Sergeyevna; YEGOROKIN, N.I., prof., retsenzent; KOTOV, M.P., prof., retsenzent; PLEMYANNIKOV, M.N., red.; KHAKNIN, M.T., tekhn.red.

[Leather and fur technology] Tekhnologiia kozhi i mekha. Pod obshchei red. N.V.Chernova. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po legkoi promyshl., 1959. 719 p. (MIRA 13:2)

1. Kafedra tekhnologii kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti (for Chernov, Aronina, Gaydarov, Golovteyeva, Strakhov, Shestakova).
(Leather) (Fur)

STRAKHOV, I.P., prof., doktor tekhn.nauk; SAL'KIN, L.B., insh.

Nature of the interaction between basic chromium compounds and polyvinyl alcohol. Izv.vys.ucheb.zav.; tekh.leg.prom. no.2: 62-68 '59. (MIRA 12:10)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti.
(Chromium compounds) (Tanning) (Vinyl alcohol)

STRAKHOV, I.P., prof.

Leather manufacture and training of engineers for the leather industry in the Korean People's Democratic Republic. Kozh.-obuv. prom. 2 no.4:34-35 Ap '60. (MIRA 13:9)
(Korea North--Leather industry)

KOZLOVA, V.D., inzh.; STRAKHOV, I.P., prof.

Effect of polyvinyl alcohol on the properties of sheepskins during tanning. Kozh.-obuv. prom. 2 no. 11:9-11 N '60.
(MIRA 13:12)

(Vinyl alcohol polymers) (Hides and skins)

STRAKOV, I.I., prof.

Organization of teaching and of scientific research works.
Koz.-obuv.prom. 3 no.3:36-37 Mr '61. (MIRA 14:6)
(Czechoslovakia--Leather industry--Study and teaching)

STRAKHOV, I.P., doktor tekhn.nauk,prof.; GUSHCHINA, I.A., inzh.

Effect of the styrol copolymer and maleic anhydride on the tanning action of aluminum salts. Kozh.-obuv.prom. 3 no.4:24-27 Ap '61. (MIRA 14:5)

(Tanning materials)

STRAKHOV, I.P., prof.

Improve the leather quality. Kozh.-obuv.prom. 3 no.11:24-25 N '61. (MIRA 15:1)

(Leather industry)

SANKIN, L.B., aspirant; STRAKHOV, I.P., doktor tekhn.nauk, prof.

Use of synthetic polymers in leather manufacture. Nauch. trudy MTILP no.23:3-28 '61. (MIRA 15:9)

1. Kafedra tekhnologii kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.
(Leather industry--Equipment and supplies) (Polymers)

SAPKIN, L.B., inzh.; STRAKHOV, I.P., doktor tekhn.nauk, prof.

Use of chromium compounds for structure development in polymers containing carboxyl groups. Izv.vys.ucheb.zav.; tekh.leg.prom. 3:28-33 '62. (MIRA 15:6)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti. Rekomendovana kafedroy tekhnologii kozhi i mekha.
(Polymers)
(Chromium organic compounds)

SOLOSHENKO, N. N., inzh.; STRAKHOV, I. P., prof.

Effect of dicyandiamide resin on the wear resistance of sole flank leather. Kozh. obuv. prom. 4 no.10:22-24 O '62. (MIRA 15:10)

(Leather) (Finishes and finishing)
(Guanidine)

STRAKHOV, I.P., doktor tekhn. nauk, prof.; LEVINKO, P.I., kand. tekhn. nauk; SHIFRIN, I.G., inzh.

Effect of radiation on leathers tanned by various methods. Izv. vys. ucheb. zav.; tekh. leg. prom. no.2:93-99 '63. (MIRA 16:10)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti (for Strakhov). 2. Moskovskiy gorodskoy sovet narodnogo khozyaystva (for Levinko, Shifrin).

STRAKHOV, I.P., doktor tekhn.nauk, prof.

Make wider use of aluminum salts. Kozh.-obuv.prom. 5 no.2:16 F '63. (MIRA 16:5)

(Tanning materials) (Aluminum salts)

KUTSIDI, D.A., inzh.; STRAKHOV, I.P., prof.

Effect of various factors on the absorption of melamine methylol compounds by chromed hides, and formation of resin in leather. Kozh.-obuv.prom. 5 no.5:10-15 My '63. (MIRA 16:5)
(Leather) (Chemistry, Technical)

STRAKHOV, I.P., doktor tekhn. nauk, prof.; LEVENKO, P.I., kand. tekhn. nauk; SHIFRIN, I.G., inzh.

Effect of gamma radiation on the chrome leather for shoe uppers. Kozh. obuv. prom. 5 no.7:20-25 Jl '63. (MIRA 16:8)

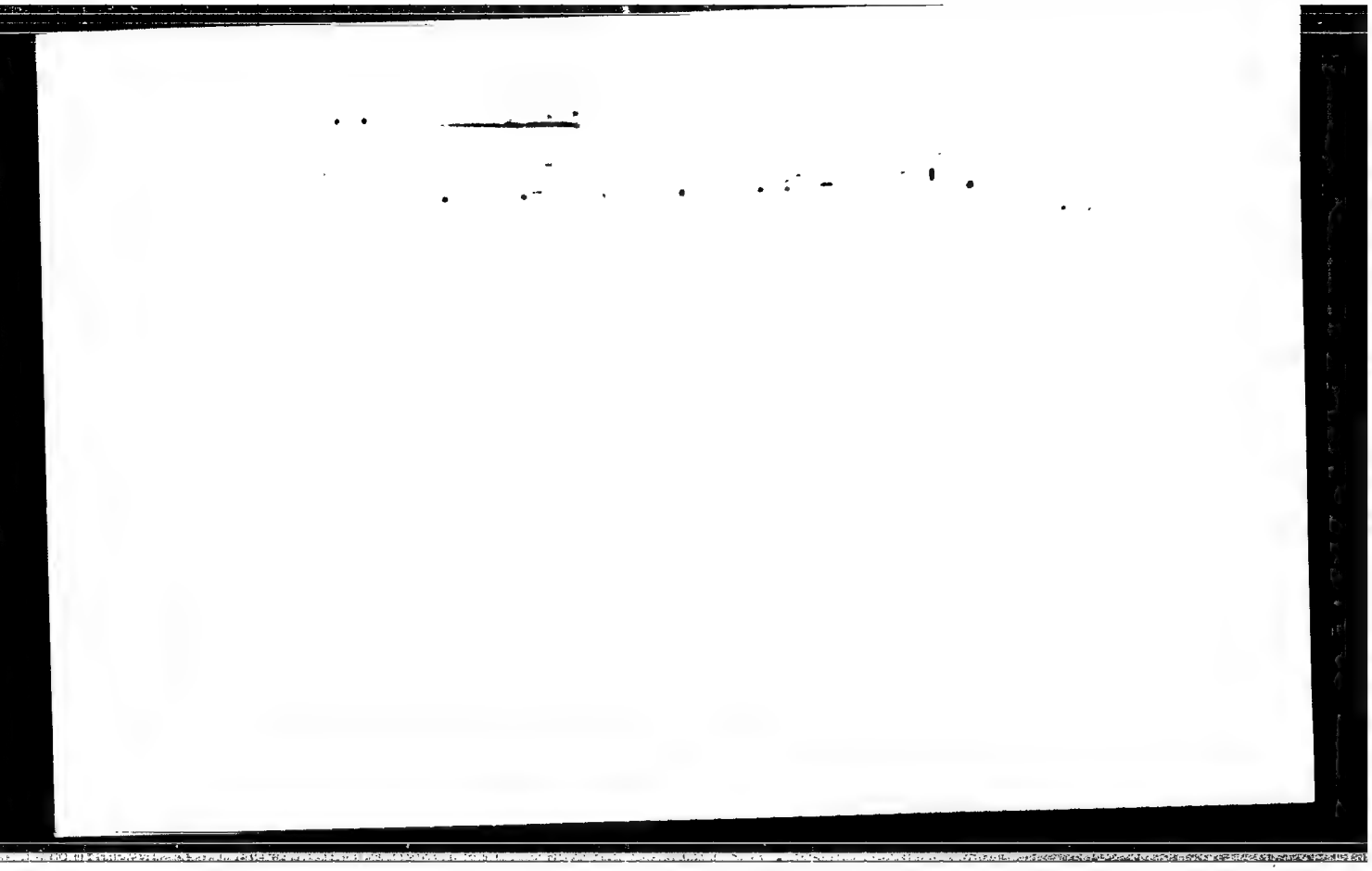
(Leather--Testing) (Radiation)

STRAKHOV, I.P., doktor tekhn. nauk, prof.; LEVENKO, I.I., kand. tekhn. nauk; SHIFRIN, I.G., inzh.

Effect of small doses of gamma radiation on some physicomechanical properties of chrome-tanned leather. Kozh.-obuv. prom. 5 no.11:24-28 N '63. (MIRA 17:1)

STRAKHOV, Ivan Pavlovich, prof.; A[illegible], Nadiya Ivanovna, [illegible]; SAKHAROV, Leonid Petrovich, [illegible]; [illegible], Antonina Alekseyevna, [illegible]; SHEVKOV, Nikolay Vladimirovich, prof.; SHESTAKOVA, Irina Sergeyevna, prof.; KOTOV, N.I., prof., retsenzent; KLOCHKOV, S.A., inzh., retsenzent; GLAGOLEVA, A.V., red.; ILIYANNIKOV, M.K., red.

[Chemistry and technology of leather and fur] Khimiia i tekhnologiia kozhi i mekha. Moskva, Legkaia industriia, 1964. 621 p. (MIRA 18:2)



APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653420012-7"

KUTSIDI, D.A., inzh.; STRAKHOV, I.P., prof.

Effect of raw leather treatment with methylol compounds of melamine on the diffusion of tannins. Kozh.-obuv.prom. 6 no.10:31-34 O '64. (MIRA 18:1)

KHARSIYEVA, M.K., aspirant; SHEKHOV, I.P., doktor tekhn. nauk, prof.

Studying the reactions of synthetic high-molecular substances with aluminum sulfate compounds. Nauch. trudy MTILP no.30: 26-33 '64. (MIRA 18:6)

1. Kafedra tekhnologii kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

[illegible], I.I., doktor [illegible], prof.; [illegible], I.G., kand.

Effect of ionizing radiation on proteins and finished leather. Nauch. trudy MTILP no.[illegible] '6[illegible].

Effect of ionizing radiation on the improvement of the wear properties of leather. Ibid.:48-55

(MIRA 18:6)

1. Kafedra kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

ACC NR: AP6014714 (A) SOURCE CODE: UR/0323/65/000/006/0057/0062

AUTHOR: Yasin, Akhmedi (Engineer); Strakhov, I. P. (Doctor of Technical Sciences, Professor)

ORG: Moscow Technological Institute for Light Industry (Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti)

TITLE: Microscopic method for determining penetration of dicyandiamide resins in hide

SOURCE: IVUZ. Tekhnologiya legkoy promyshlennosti, no. 6, 1965, 57-62

TOPIC TAGS: microscopy, tanning material, anionite, ion exchange resin, surface active agent, leather

ABSTRACT: The penetration of dicyandiamide resins in rawhide and tanned semifinished product was determined by microscopic examination of the hide or leather treated with dyed resins. Cationic resin was prepared by reacting 1 mol dicyandiamide with 4.1 mol formaldehyde, using borax catalyst; anionic resin was made from 1 mol dicyandiamide, 4.0 mol formaldehyde and 0.36 mol sodium bisulfate. These resins were dyed with a "remazol" dye (providing an active vinyl sulfone group to react with the resin in weak alkali) which did not affect resin penetration or leather properties. The resins did not penetrate clean rawhide or the chromed semifinished leather very far from either the top or flesh side of the hide. Prior treatment of hide or leather with surface

Card 1/2

[redacted], I.P., prof.

[redacted] and technical specialists for the light industry. Koz.-obuv. prom. 7 no. 10:6-9 O '65 (MIRA 18:11)

1. Rektor Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

ACC NR: AP6019948 (A) SOURCE CODE: UR/0323/66/000/001/0068/0072

AUTHOR: Kirakos'yants, M. Kh. (Candidate of Technical Sciences); Strakhov, I. P. (Prof.; Dr. of Technical Sciences)

ORG: Leather and Fur Technology Department, Moscow Technological Institute of the Light Industry (Kafedra tekhnologii kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti)

TITLE: Study of the tanning effect of modified sulfate complexes of aluminum

SOURCE: IVUZ. Tekhnologiya legkoy promyshlennosti, no. 1, 1966, 68-72

TOPIC TAGS: aluminum compound, complex molecule, tanning material, gelation

ABSTRACT: The nature of the chemical bonding and of the tanning effect of aluminum complexes in their interaction with gelatin was studied on modified complexes. The tanning capacity of the latter was characterized by the melting point of the tanned gelatin gel and by its stability to the action of concentrated HCl. Tartrate, citrate, oxalate, and lactate aluminum complexes were tested. The introduction of modified aluminum complexes into the gelatin solutions produced coagulation of diverse character which varied with the type of aluminum complex and its concentration. Three types of variations were observed: (1) formation of gel with negligible coagulation, (2) gelation with marked coagulation (melting point no higher than

Card 1/2

STRAKHOV, I.V.

Guiding the work of students in a psychology study group. Vop. psikhol. 3 no.2:149-151 Mr-Ap '57. (MLRA 10:6)

1. Kafedra psikhologii Saratovskogo pedagogicheskogo instituta.
(Psychology--Study and teaching)

STRAKHOV, I.V. (g. Saratov)

The problem of character in the work of the Department of Psychology of the Saratov Pedagogical Institute [with summary in English]. Vop. psikhol. 4 no.5:146-158 S-O '58. (MIRA 11:12)
(Character)

STRAKHOV, I.V.

Psychological basis of pedagogical tact. Vop.psikhol. 6 no.3: 57-63 My-Je '60. (MIRA 14:5)

1. Kafedra psikhologii Saratovskogo pedagogicheskogo instituta.
(Educational psychology)

STRAKHOV, I.V.

"Psychology of the imitative activity of children" by E.I. Ignat'ev. Reviewed by I.V.Strakhov. Vop. psikhol. 6 no. 6:181-183 N-D '60. (MIRA 13:12)

1. Kafedra psikhologii Saratovskogo pedagogicheskogo instituta.
(Children as artists--Psychological aspects)
(Ignat'ev, E.I.)

A. A. MINA, T.M., BARDIN, K.V.; STRAKHOV, I.V.

Reviews and bibliography. Vop. psikhol. 11 no.3:165-182 My-Jo '65.
(MIRA 18:7)

1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva (for Kovalev, Bardin). 2. Kafedra psikhologii Odesskogo universiteta (for Kostina). 3. Pedagogicheskiy institut, Saratov (for Strakhov).

MESHCHANIKOV, B.N.; STRAKHOV, K.I.; LEVIN, Ya.Ye.; BOS'KO, K.P.; KUZ'MIN, V.A.
MELYANTSEV, V.F.; YEFREMOV, A.F.

New method of smelting and pouring oxidizing alloys. Prom. energ. 12 no.3:25 Mr '57. (MLRA 10:6)
(Alloys) (Smelting)

SOV/4-58-11-10/28

AUTHOR: Aerov, L.P.
Bas'kov, K.P.
Bovin, V.G.
Georgiyevskiy, P.I.
Ivin, Ya. Ye.
Kuz'min V.A.
Straknov, K.I.
Shageyev, Ye. A.

TITLE: The Production of Accurate Castings by the Lost Wax Process with Patterns Made of Composition MAI-KTM-500. (Proizvodstvo tochnogo liy'ya po vyplavlyayemym modelyam na sukhom napolnitele s primeneniyem splava MAI-KTM-500)

PERIODICAL: Promyshlennaya Energetika, 1958, Nr 11, pp 19-21 (USSR)

ABSTRACT: This article is about a suggestion that was awarded second premium in an All-Union power economy competition. The staff of the works together with the Chair of Metal Technology of the Moscow Aviation Institute developed and introduced the process of accurate casting by the lost wax process using a dry filler for the pattern, composition MAI-KTM-500 instead of the old wet filler. The composition previously used for making patterns is given, the new composition

Card 1/2

The Production of Accurate Castings by the Lost Wax Process with Patterns Made of Composition MAI-KTM-500

consists of 84.5% rosin, 11.8% paraffin wax, 1.0% ceresine, 0.4% bitumen. A variety of different parts that have been produced by this method are illustrated in Figs. 1,2 and 3. A wider range could be made than previously because the ceramic covers of the moulds are much stronger than before. The new composition can be used repeatedly. The advantages of the new composition over materials of lower and higher melting points are briefly stated. When the composition is melted out of the mould little damage is done because its coefficient of expansion is small. Indeed, the moulds are even strengthened because the composition penetrates into the pores of the ceramic. Especially good results were obtained with the new material in the manufacture of turbine blades as shown in Fig 4. As a result of introducing the new method of accurate casting, the annual economy of electric power is more than 2.4 million kWh and working conditions have been improved. There are 4 figures.

STRAKHOV, K.I., inzh.

Underground streams and brooks in Moscow. Gor.khoz.Mosk. 35 no.7.24-26 Jl '61. (MIRA 14:7)
(Moscow--Water, Underground)

IVIN, K.V.; [illegible] I.A.; YEGOROV, N.D.[deceased]; MARKOVNIKOV, V.L., doktor tekhn. nauk; VATSURO, M.A. [deceased]; KOROLOVA, L.P.; STRAKHOV, K.I.; DOL'KIN, I.A.; FAYN, A.G.; KHRUSKIY, N.V.; SPISKOV, V.S.; PERKIS, D.I., kand. tekhn. nauk; LUCHAY, G.A., retsenzent; TIMOFEYEV, A.N., otv. red. toma; VLASCHENOV, V.N., red.; SHPOLYANSKIY, M.V., red.; [illegible]OTOCHKINA, M.A., red.izd-va; LEBEDEVA, A.A., tekhn. red.

[Technical handbook on electric city transportation in three volumes] Tekhnicheskii spravochnik po gorodskomu elektrotransportu v trekh tomakh. Redkoll.: V.N.Volochnev, A.N.Trofimov, M.N.Shapoli'nskii. Moskva, Izd-vo M-va kommun.khoz.RSFSR. Vol.3. [Trolley buses] Trolleibus. (MIRA 16:10) 1962. 722 p. (Trolley buses)

STRAKHOV, K.I., inshener.

Problem of improving the quality of single-layer asphalt concrete coatings. Gor.khoz.Mosk. 27 no.10:17-20 O '53. (MLRA 6:11)
(Moscow--Pavements, Asphalt)

STRAKHOV, K.I.; ZELENEVSKIY, V.A., inshener; LEBEDEV, N.V., inshener.

Review of K.I.Strakhov's book "City Street Planning." Gor.khoz. Mosk. 27 no.12:34-35 D '53. (MLRA 6:12)
(Streets) (City planning) (Strakhov, K.I.)

STRAKHOV, K.I., inzhener.

Improving the quality and cost of road construction work. Gor. khoz. 29 no.5:36-37 My '55. (MLRA 8:6)
(Moscow--Road construction)

STRAKHOV, K.I., inzhener.

On main highways leading into large cities. Gor.khoz. Mosk. 30 no.5:7-12 My '56. (MLRA 9:8)
(Road construction)

STRAMENTOV, A.Ye. professor, doktor tekhnicheskikh nauk; STRAKHOV, K.I. , inzhener.

Main city highways. Gor.khoz.Mosk.31 no.1:35-38 Ja '57. (MIRA 10:3)

(Road construction)

STRAMENTOV, A.Ye., prof., doktor tekhn.nauk; STRAKHOV, K.I., inzh.

New cities in England. Gor.khoz.Mosk. 31 no.11:36-40 N '57. (MIRA 10:12)

(Great Britain--City planning)

STRAKHOV, K. I., Cand Tech Sci — (diss) "Study of the problem of leading ~~in~~ main automobile arteries into large cities of the USSR." Mos, 1958. 10 pp (Acad of ~~Communal~~ Economy im K. D. Panfilov), 100 copies (KL, 18-58, 100)

STRAKHOV, K.I., inzh.

Manual on the organization of city traffic ("City traffic and the planning of squares". Gor. khoz. Mosk. 32 no.10:43 O '58. (MIRA 11:11)
(Traffic engineering)

STRAKHOV, K.I., inzh.

Constructing traffic intersections on various levels in Moscow.
Gor.khoz.Mosk. 33 no.8:18-24 Ag '59. (MIRA 12:11)
(Moscow--Underpasses)

KOZLOVSKIY, B.K., inzh., red.; STRAKHOV, K.I., inzh., red.; PETROVA, V.V., red.izd-va; RUDAKOVA, M.I., tekhn.red.

[Norms and technical specifications for planning city streets, roads, and squares; SN 80-60] Normy i tekhnicheskie usloviia proektirovaniia gorodskikh ulits, dorog i ploshchadei SN 80-60. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 89 p. (MIRA 13:8)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva.

(Roads--Design)

IAKOVLEV, V.A.; MIKHAYLOVSKAYA, A.M.; ARTAMONOV, M.A.; SLAVIN, Yu.T.; STRAKHOV, E.I.; KORNYUSHIN, A.K.

Induction furnace for melting [magnesium] alloys; suggestion by V.A.IAkovlev and others. Prom.energ.11 no.6:28-30 Je '56. (MLRA 9:9)
(Electric furnaces) (Magnesium alloys)

AKROV, L.P.; BAS'KOV, K.P.; BOVIN, V.G.; GEORGIYEVSKIY, P.I.; IVIN, Ya.Ye.; KUZ'MIN, V.A.; STRAKHOV, K.I.; SHAGSTYEV, Ye.A.

Producing precise castings of models by means of the MAI-KMT-500 alloy used with a dry filler. Prom. energ. 13 no.11:19-21 N '58. (MIRA 11:11)
(Molding (Founding))

SOV/94-58-12-9/19

AUTHORS: Straknov, K.I., Andrianov, S.I., Yakovlev, V.A., Ivanchenko, I.N. and Yakovich, A.I.

TITLE: A Continuously Operating Induction Heater for Heating Hot Stamping Tools (**Induktsionnyye nagrevateli nepreryvnogo deystviya dlya nagreva shtampov**)

PERIODICAL: Promyshlennaya Energetika, 1958, Nr 12, pp 20-21 (USSR)

ABSTRACT: Hot stamping tools are usually heated by tubular heaters but it takes a long time to heat the tools up in this way. The authors have developed a method of using induction heating for these tools. Insulated conductors are inserted in the tools as shown in the sketch and a 50 kVA transformer is used for supply. Conductor dimensions and current ratings are given. An electronic temperature controller is used. With this method of heating the tools are heated continuously and uniformly, the heating time is cut by a factor of five and is now 1.5 to 2 hours, production is of better quality and the power consumption is much less. This suggestion was

Card 1/2

SOV/94-58-12-9/19

A Continuously Operating Induction Heater for Heating Hot Stamping Tools

Awarded a fourth premium in an All-Union Power Economy competition. There is 1 figure.

Card 2/2

85028
S/094/60/000/010/002/002
E073/E335

High-temperature Induction Furnace of Industrial Frequency for Brazing of Components

The housing is made of ordinary "steel 5" and its dimensions are 1 000 x 1 000 mm. To prevent heating of the housing separation gaps are provided. The inductor is a two-layer one and has 78 turns of a 16 x 16 mm hollow aluminium conductor The outer layer has 5 tappings, enabling selection of the necessary thermal regime of the furnace The dimensions of the inductor are: external diameter 823 mm, internal diameter 785 mm and height 750 mm. The thermal insulation is made of "ultra-lightweight" material (between the internal layer and the external surface of the muffle) and firebrick. The muffle is made of refractory [illegible] (EI-435) sheet steel, 11 mm thick, the joints are fused by argon arc welding The cover of the furnace is of nonmagnetic steel, 14 mm thick with a pipe connection for fitting a vacuum pump, introducing a gas flux and thermocouple. On the inside the lid is fitted with thermal insulation On the outside it is water cooled The furnace characteristics are as follows power 65 kW voltage 380 V, current consumption 180 A current intensity

Card 2/3

S/094/60/000/010/002/002
E073/E335

High-temperature Induction Furnace of Industrial Frequency for Brazing of Components

in the furnace 700 A, rating of the condenser bank 350 kVAr, temperature 1 200 - 1 250 °C. This furnace has the following advantages: the power consumption is only one-quarter of that of a chamber furnace, the process is much less laborious, a great saving is obtained in expensive refractory metal for manufacturing the muffles. The annual saving in electricity amounts to 600 000 kWh. This proposal was awarded second prize in the Fifteenth All-Union Competition for Saving Energy. There is 1 figure

Card 3/3

STRAKHOV, L., inzh.

Twenty combined brigades are working. Avt.dor. 28 no.11:31 N '65. (MIRA 18:11)

MIKOYAN, A.I.; MARINENKO, A.Ye., inzh.; RAPPOPORT, A.M., inzh.; SLEPNEV, K.V., inzh.; SYROVOY, P.Ye., inzh.. Prinimali uchastiye: BORODIN, D.D., inzh.; ZHARKOV, M.A., inzh.; SHIPUNOV, B.G., inzh.; KURAKOV, V.Ya., tekhnik. STRAKHOV, L.G., otv.red.; KOMPANTSEV, N.N., otv.red.; KRASIL'NIKOV, S.D., red.; ZUDAKIN, I.M., tekhn.red.

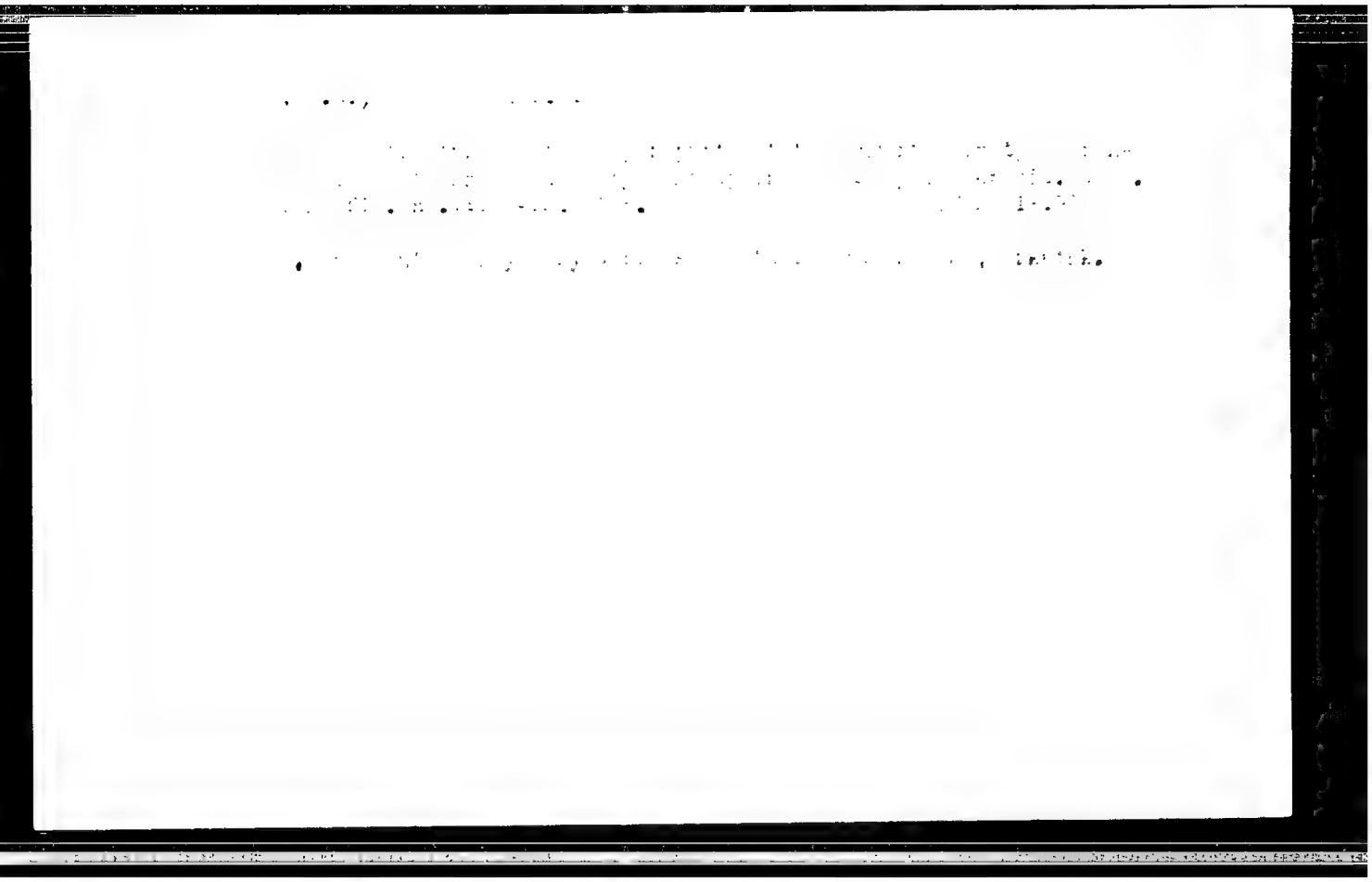
[The MIG-17PF and MIG-17F airplanes; instructions for operation and maintenance] Samolety MiG-17PF i MiG-17F; instruktsiia po tekhnicheskoi ekspluatatsii i obsluzhivaniiu. Moskva, Gos.izd-vo obor.promyshl., 1957. 143 p. diagrs.

1. Russia (1923- U.S.S.R.) Ministerstvo oborony. (Fighter planes) (Jet planes, Military)

ANTIPOV, G.I.; IVASHCHENKO, M.A. [deceased]; KORABEL'NIKOVA, V.V.; KOSYGIN, M.K., dotsent; KUZNETSOV, O.A., dotsent; PEKARIN, P.M.; ROSLYAKOV, G.V., dotsent; STRAKHOV, L.G.; CHERNYSHEV, G.B., red.; TKALICH, S.M., red.; MUKHIN, S.S., red.izd-va; GUROVA, O.A., tekhn.red.

[Angara-Ilim iron ore deposits of trap formation in the southern Siberian Platform] Angaro-Ilimskie zhelezorudnye mestorozhdeniia trappovoi formatsii iuzhnoi chasti Sibirskoi platformy. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1960. 375 p. (MIRA 13:10)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr. 2. Geologi Irkutskogo geologicheskogo upravleniya (for Antipov, Ivashchenko, Korabel'nikova, Pekarin, Strakhov). 3. Irkutskiy gornometallurgicheskiy institut (for Kosygin, Roslyakov). 4. Irkutskiy gosudarstvennyy universitet (for Kuznetsov). 5. Glavnyy inzh. Irkutskogo geologicheskogo upravleniya (for Tkalich).
(Angara-Ilim region--Iron ores)



USSR/Electronics - Photoconductors

Card 1/1 Pub. 153-27/28

Author : Berlaga, R. Ya., and Strakhov, L. P.

Title : Origin of the emf that arises when lead sulfide photoconductors are illuminated

Periodical : Zhur. tekh. fiz. 24, p 943, May 1954

Abstract : A letter to the editor. The author obtained PbS layers which under the illumination of a 100-watt lamp gives an emf as high as 1.0 volts Observing that some of these layers possessed a sharply expressed dependence of the magnitude and even sign of the emf upon the direction of the light flux. The best effect was observed in layers obtained from PbS specimens evaporated in a CO_2 atmosphere under a pressure of 0.05-0.10 mm and temperature of deposition of 240-250°C, after which the layer is heated to 500°C and held at this temperature for 5-10 minutes and then cooled in the jar of a vacuum pump down to room temperature. Thanks Acad. A. A. Lebedev.

Institution :

Submitted : November 2, 1953

ditions: PbS was heated to various temps. in air for 2-5 min., the samples were cooled, and the measurements made at room temp. A preliminary investigation had shown that heating in air to 550° for 8-10 min. would cause the e.m.f. to drop to 3 v., whereas the same treatment in vacuo left the e.m.f. at about 10 v. Prior to the expts. the photoelectromotive force was 0.009 v.; the following values were found after heating to 150, 200, 300, 400, 500, and 600°: 0.0034, 0.102, 0.08, 0.22, 0.7, and 0 v., resp. After consideration of the preliminary expt. one may say that the max. would be at a heat-treatment of 500-550°.

Werner Jacobi

3

STRAKHOV, L. F.

USSR/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 60933

Author: Berlaga, R. Ya., Rudenok, M. I., Strakhov, L. F.

Institution: None

Title: On Structure of Thin Layers of PbS Produced by Evaporation in Vacuum

Original Periodical: Zh. tekhn. fiziki, 1956, 26, No 1, 3

Abstract: Electron microscopic investigations of sublimated layers of PbS (I) (Referat Zhur - Khimiya, 1956, 50034) show that surface of I layer is covered with needle crystals the axes of which are directed approximately parallel to the molecular cluster on sublimation of I. Length of crystals varies from 0.2 to 8 μ although conditions of sublimation are the same. Layers with short crystals have a mirror surface, those with longer crystals a dull surface. After heating in air at 700° shape of crystals is changed which is attributed to formation of lanarkite $PbO \cdot PbSO_4$. Investigations of reflecting

Card 1/2

Generation of photo-EMF in Layers of Sulphurous Lead PA - 2588

tion of the photo-EMF is connected with the production of p-n transitions between the oxidized surface layer of the dendrite and its not oxidized central mass. This manner of generation of photo-EMF, which, in the authors opinion is the most probable, will agree with the rule found with respect to signs if the illumination of the oxidized PbS surface leads to a reduction of the potential of the surface layer with respect to the interior not oxidized part.
(5 ill. and 6 citations from publications in Slav language).

ASSOCIATION
PRESENTED BY
SUBMITTED
AVAILABLE Library of Congress
Card 2/2

BERLAGA, R.Ya.; NOVIK, F.T.; STRAKHOV, L.P.

Production of lead sulfide photoresistors by chemical precipitation. Fiz. tver. tela 1 no.6:995-996 Je '59. (MIRA 12:10)

1. Problemnaya laboratoriya poluprovodnikov Lengosuniversiteta.
(Lead sulfide) (Photoelectricity)

[redacted], L. P. Cand Phys-Math Sci -- (diss) "Alteration of the contact potential of photoresistances during exposures." Leningrad, 1956, 13 pp, (Leningrad State Pedagogical Inst im A. I. Gertsen), 200 copies, (KL, 32-60, 145)

81969
S/161/60/002/04/34/034
B002/B063

24.26.0

AUTHORS: Artamonov, O. M., Strakhov, L. P.

TITLE: The Appearance of Electromotive Force in Lead Sulfide Layers Due to Irradiation With Slow Electrons

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 4, pp. 775-776

TEXT: Photo-electromotive forces in polycrystalline lead sulfide layers produced by vacuum vaporization on glass have been observed repeatedly (Refs. 1-3). This news in brief gives a report on electromotive forces arising by irradiation of such layers with slow electrons (3 - 300 ev). Value and sign of this emf depend on the energy and the angle of incidence of the electrons. At energies of over 150 ev the angle of incidence for which the sign changes approximately corresponds to the angle of incidence of inversion in visible light. The value of the emf usually amounts to only some hundredths of volts, but much more for certain critical angles: An electron beam of $\sim 10^{-8}$ a and an energy of ~ 100 ev produced an emf

Card 1/2

of about 1 v; the short-circuit current attained 10^{-6} a. If the energy of the incident electrons is changed, the value and even the sign of the emf change, especially between 30 and 100 ev. If the irradiation is made simultaneously with light and electrons, the emf is approximately equal to the sum of electromotive forces arising by the action of light or electrons alone. The authors thank Academician A. A. Lebedev for having posed the subject, and Docent R. Ya. Berlaga, Head of the Laboratoriya poluprovodnikov i elektroniki LOLGU (Laboratory for Semiconductors and Electronics of the LOLGU) for interest displayed. There are 4 references: 2 Soviet, 1 American, and 1 German.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet, Problemnaya laboratoriya poluprovodnikov
(Leningrad State University, Laboratory for Semiconductor Problems)

SUBMITTED October 6, 1959

Card 2/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653420012-7"

9,4170 (1051, 1482)
26.2532

23133
S/181/61/003/005/038/042
B111/B202

AUTHOR: Strakhov, L. P.

TITLE: Spectral dependence of the changes of the surface potential of CdSe during illumination

PERIODICAL: Fizika tverdogo tela, v. 3, no. 5, 1961, 1612-1613

TEXT: In a number of semiconductors (Ge, Se, ZnS, CdS, PbS, etc.) irradiation causes a potential change $(\Delta_{KPT})_{CdS}$. The author studies the changes of the surface potentials in thin CdSe films in the range of from 450 to 1000 mμ. The surface potential was measured on air according to the difference of the contact potentials Pt - CdSe by means of a vibrating capacitor. The films were produced by vacuum sublimation of CdSe to the (100) face of NaCl. After the sublimation the film was detached by dissolution in pure, distilled water and applied to the plate of the vibrating capacitor. A 400 w electric bulb and a УМ - 2 (UM - 2) monochromator were used for the experiment. The figure refers to a 1.2μ thick film which is characteristic of such layers. It shows that the sign of $(\omega_{УРТ})_{CdS}$ changes and that the

Card 1/4

Spectral dependence of ...

curve has a maximum in the visible range of the spectrum and a negative minimum in the infrared with the point where the sign changes, coinciding almost exactly with the end of the range of absorption. Curve II is the absorption curve in relative units (a). A study of dependence of the potential change $(\Delta_{\text{кат}})_{\text{ОСВ}}$ on the intensity of the incident light shows that it has the character of an increasing saturation curve with the increase following the law $(\Delta_{\text{кат}})_{\text{ОСВ}} \sim \sqrt{I}$, I-intensity of the incident light. That part of the curve I which corresponds to the range of saturation (in which it is independent of the intensity of the incident light) and where the range that extends from the short waves to the maximum of the curve is excluded, is not referred to the unity of the incident energy. A similar spectral distribution also occurs in thin CdTe films. The author assumes that the effect of the internal crystalline field on the electrons released in the surface region due to irradiation causes the change of the course of $(\Delta_{\text{кат}})_{\text{ОСВ}}$ occurring in the case of long waves. The author thanks Academician A. A. Lebedev for his interest. Abstracter's note: Complete translation.

Card 2/4

Spectral dependence of ...

There are 1 figure and 9 references: 4 Soviet-bloc and 5 non-Soviet-bloc.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet imeni A. A. Zhdanova, Problemnaya laboratoriya poluprovodnikov (Leningrad State University imeni A. A Zhdanov, Laboratory of Semiconductor Problems)

SUBMITTED: July 4, 1960 (initially)
November 26, 1960 (after revision)

Card 3/4

24 7000 1043, 1160, 1143

29081
S/181/61/003/009/013/039
B102 B104

AUTHORS: Kalinkin, I. P., Sergeyeva, L. A., Aleskovskiy, V. B., and Strakhov, L. P.

TITLE: Production of cadmium selenide single crystals

PERIODICAL: Fizika tverdogo tela, v. 3, no. 9, 1961, 2640-2645

TEXT: A number of methods are known for the production of semiconductor single-crystal films, however, the properties of these films mainly depend on the type of the backing and the production conditions. To study these dependences the authors produced CdSe films on alkali halide backings under very rigorous conditions. The initial material was CdSe (impurities $\cdot 10^{-4}$% Fe, $2 \cdot 10^{-4}$% Cu, $2 \cdot 10^{-4}$% Ni, $5 \cdot 10^{-4}$% Co, $5 \cdot 10^{-5}$% Mn) supplied by the works "Krasnyy khimik" (Red Chemist) and was heated in a vacuum. The (111) faces of artificial NaCl, KCl, and KBr single crystals, treated by different methods and examined under a metallographic microscope, type MIM-7 (MIM-7), and a BC-242 (BS-242) electron microscope prior to the sputtering of CdSe, were used as backings. It was found that the surface

Card 1/3

Production of cadmium selenide ...

conditions had an area of 2-12 cm^2. There are 7 figures, 1 table, and 16 references: 8 Soviet and 8 non-Soviet. The three most recent references to English-language publications read as follows: R. P. Ruth, J. C. Marinace, W. C. Dunlap. J. Appl. Phys., 31, 6, 995, 1960.
J. H. V. Setty, M. Wilman. Trans. Farad. Soc., 51, 7, 984, 1955.
W. Lavis, R. F. Lever, J. Appl. Phys., 27, 845, 1956.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Technological Institute imeni Lensovet)

SUBMITTED: April 3, 1961

Card 2/2

STRAKHOV, L.P.; CHERNYAVSKIY, B.G.; KALINKIN, I.P.; OVSYUK, Z.Sh.

Spectral distribution of optical changes in the contact potential of CdSe films. Fiz.tver.tela 4 no.12:3422-3426 D '62. (MIRA 15:12)

1. Leningradskiy gosudarstvennyy universitet.
(Cadmium selenide—spectra)

S/181/63/005/001/020/064
B102/B186

AUTHORS: Kalinkin, I. P., Sergeyeva, L. A., Alenkovskiy, V. B., and Strakhov, L. P.

TITLE: Investigation of the structure of thin cadmium selenide films condensed onto the (100) and (110) faces of rock-salt single crystals

PERIODICAL: Fizika tverdogo tela, v. 5, no. 1, 1963, 124-128

TEXT: CdSe was sublimated under conditions described in FTT, 3, 9, 2640, 1961 and deposited on the (100) and (110) faces of NaCl kept either at room temperature or at 250° or 500-550°C. The hexagonal polycrystalline films (c=7.02Å a=4.3)Å formed on these faces were investigated using a microscope, an electron microscope and electron diffraction. In the case of sublimation at 250°C onto the (100) face the following phases were observed: A cubic one with $(100)_{cub} \parallel (100)_{NaCl}$ and $[1\bar{1}0]_{cub} \parallel [100]_{NaCl}$; two hexagonal phases with $(0001)_h \parallel (100)_{NaCl}$, $[11\bar{2}0]_h \parallel [1\bar{1}0]_{cub}$; a polycrystalline hexagonal phase; mixed phases e. g. cubic with hexagonal

Card 1/2

STRAKHOV, L.P.; TU SHAN'-TSZE [T'u Shan-chieh]

Device for measuring magnetic susceptibility. Prib. i tekh. eksp. 8 no.2:145 Mr-Ap '63. (MIRA 16:4)

1. Leningradskiy gosudarstvennyy universitet.
(Magnetic measurements)

L 11110-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD
ACCESSION NR: AP3000783 S/0070/63/008/003/0459/0461

AUTHOR: Kalinkin, I. P.; Sergeyeva, L. A.; Aleskovskiy, V. B.; Strakhov, L. P.

TITLE: Electron diffraction study of the structure of single-crystal cadmium selenide films

SOURCE: Kristallografiya, v. 8, no. 3, 1963, 459-461

TOPIC TAGS: film, vacuum sublimation, electron diffraction, single crystal film, orienting substrate, microstructure, molybdenum glass, decomposition, cadmium selenide film, sodium chloride

ABSTRACT: The paper describes the latest results of studies by the authors on the deposition by vacuum sublimation of CdSe films on various substrates. By using as orienting substrates etched NaCl crystals which were subjected to preliminary mechanical and heat treatment (at 350—550C for 1—3 hr), "thin" (0.05—μ) CdSe single-crystal films were deposited on the (100) and (111) faces of the crystals. Electronographic study showed that, depending on preliminary treatment and etching time, films with a cubic, hexagonal, or mixed structure

Card 1/2

L 11110-63
ACCESSION NR: AP3000783

can be prepared. "Thin" CdSe films removed from NaCl crystals and transferred onto molybdenum glass were used as orienting substrates for preparing "thick" (~ 0.6μ) single-crystal films by additional vacuum sublimation (~ $5 \cdot 10^{-5}$ mm Hg) of CdSe. The temperature of the substrates varied between 150 and 350C. Additional deposition under selected unidentified conditions made it possible to prepare "thick" single-crystal CdSe films with either hexagonal, mixed, or cubic structures. "Thick" single-crystal films with a cubic structure could be prepared by additional vacuum sublimation only on the (100) face of NaCl crystals. "The authors are grateful to M. A. Rumsh for discussion of certain results of the work." Orig. art. has: 6 figures.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Technological Institute)

SUBMITTED: 22Oct62 DATE ACQ: 21Jun63 ENCL: 00

SUB CODE: CH NO REF SOV: 005 OTHER: 002

Card 2/2

ACCESSION NR: AP4019870 S/0181/64/006/003/0952/0954

AUTHORS: Moshkova, O. N.; Strakhov, L. P.

TITLE: The spectral distribution of light change of the contact potential in CdSe, depending on the surface state

SOURCE: Fizika tverdogo tela, v. 6, no. 3, 1964, 952-954

TOPIC TAGS: spectral distribution, contact potential, surface condition, cathode sputtering

ABSTRACT: This paper offers further experimental data to support the treatment of spectral distribution of the light change of contact potential as discussed by L. P. Strakhov, B. O. Chernyavskiy, I. P. Kalinkin, and Z. Sh. Ovsyuk (FTT, 4, 3423, 1962). A negative minimum is associated with light change of the potential at the face and the back of a film in contact with its base. The light change at the back of this film should give the greatest change. Previous work dealt chiefly with the face of the film, because strong absorption in the spectral range employed had a large effect on the positive maximum and a small effect on the negative minimum. To test this, the authors obtained cathode-sputtered films in

Card 1/4

ACCESSION NR: AP4019870

residual gas or argon (pressure of about $2 \cdot 10^{-2}$ to $3 \cdot 10^{-2}$ mm Hg). After short-period cathode sputtering (2-3 min) the positive maximum diminished, and after long-period sputtering (10-20 min) it disappeared entirely. In thin films (0.3-0.4 μ), the light of all wave lengths employed penetrated the entire thickness of the film, and no reversal of sign occurred in the light charge. Cathode sputtering, diminishing or suppressing surface light change of potential, led to a negative minimum. The experimental results are summarized in Figs. 1 and 2 on the Enclosures. The authors conclude that cathode sputtering leads to a removal of adsorbed gas on the surface and to an increase in polycrystalline phase at the surface. "The idea for these experiments belongs to Academician A. A. Lebedev, to whom the authors express their sincere gratitude. Some of the measurements were made by degree student O. N. Zhukova. Orig. art. has: 2 figures.

ASSOCIATION: Leningradskiy gosudarstvenny*y universitet (Leningrad State University)

SUBMITTED: 10Nov63 DATE ACQ: 31Mar64 ENCL: 02

SUB CODE: OP, SS NO REF SOV: 003 OTHER: 001

Card 2/4

ACCESSION NR: AP4019870

ENCLOSURE: 01

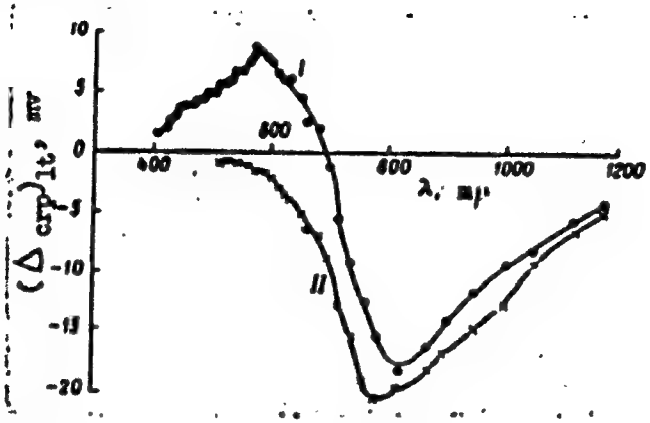


Fig. 1. Spectral distribution of surface light change of potential $(\Delta_{crp})_{lt}$ for film 1.1 μ.

I - before cathode sputtering; II - after cathode sputtering of film surface.

Card 3/4

ACCESSION NR: AP4019870

ENCLOSURE: 02

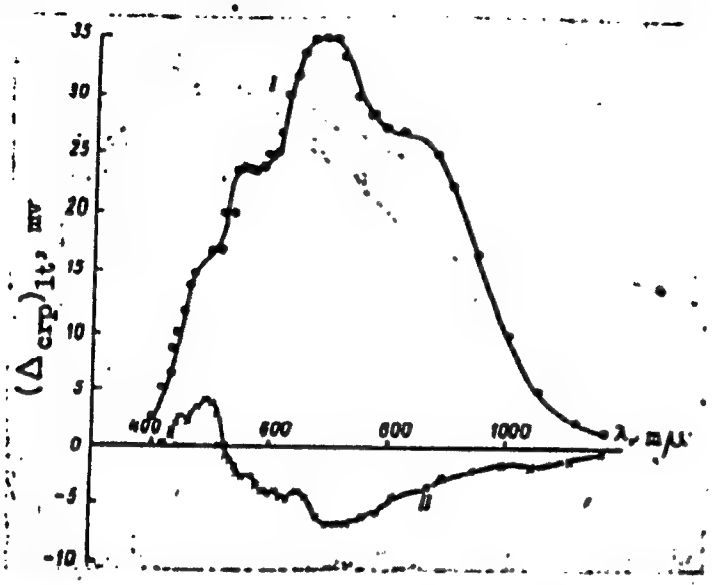


Fig. 2. Spectral distribution of surface light change of potential $(\Delta_{crp})_{lt}$ for film 0.36μ thick.

I - before cathode sputtering; II - after cathode sputtering of film surface.

Card 4/4

ACC NR: AT6024[illegible] SOURCE CODE: UR/0181/66/008/007/2260/2262

AUTHOR: Borodkina, N. K. Strakhov, L. P.

ORG: Leningrad State University im. A. A. Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: Optical anisotropy of films obtained with an obliquely incident molecular beam

SOURCE: Fizika tverdogo tela, v. 8, no. 7, 1966, 2260-2262

TOPIC TAGS: antimony compound, selenide, photoconductivity, semiconducting film, optic property, photo emf, molecular beam

ABSTRACT: Since the use of obliquely incident molecular beams has been found to be the cause of the enhanced photoconductivity of thin semiconducting films produced by this method, the authors have investigated the optical anisotropy of thin Sb_2Se_3 films, which generate a high-voltage photo emf. Optical anisotropy is defined as the dependence of the coefficient of absorption of polarized light on the mutual orientation of the electric vector (E) and the projection (s) of the molecular beam on the substrate. The films were produced by evaporation on a glass substrate in vacuum, using a procedure described by V. M. Lyubin and G. A. Fedorova (FTT v. 4, 2026, 1963). The film thickness ranged from 20 to 30 nm. The anisotropy was investigated with a monochromator, polarization filter, and a photomultiplier. The difference between the absorption coefficients, obtained as the angle between E and s was varied from 0° to 90°, increased monotonically at a rate faster than linear. Tests made to ascertain that

Card 1/2

L 05632-67

ACC NR: AP6024506

3

the anisotropy was not due to the substrate, or to other extraneous effects, are described. The results show conclusively that thin semiconducting films produced with an obliquely incident beam possess optical anisotropy. The authors thank M. A. Rumsh, F. T. Novik, and V. I. Kruglov for interest in the work and a discussion. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 21Oct65/ ORIG REF: 002/ OTH REF: 004

Card 2/2

ACC NR: AP7005007 SOURCE CODE: UR/0054/66/000/003/0066/0069

AUTHOR: Kruglov, V. I.; Nikandrova, G. A.; Strakhov, L. P.

ORG: none

TITLE: Photoconductivity of vitreous As_2Se_3

SOURCE: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii, no. 3, 1966, 66-69

TOPIC TAGS: photoconductivity, selenide, arsenic compound

ABSTRACT: The spectral distribution of the photoconductivity of vitreous As_2Se_3 was determined by means of a U1-2 amplifier with compensation of the dark current. Two maxima, $\lambda = 0.9\mu$ and $\lambda = 0.77\mu$, were observed. The long-wave photoconductivity maximum is located at the edge of the fundamental absorption band. A fairly strong light scattering is observed in the same spectral range. The spectral distribution of "long-range" photoconductivity, i. e., one which is manifested when the sample is illuminated from the side of the interelectrode space, was determined. Using the concepts of direct and indirect transitions, the authors examine the nature of absorption at the edge of the fundamental absorption band. The photoconductivity at this edge and the photoconductivity in the shorter-wave range of the spectrum differ in their kinetic characteristics. Curves of photoconductivity kinetics for various wavelengths are given. At longer wavelengths, a slower rise and decrease of the photoconductivity are observed. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 13Oct65/ ORIG REF: 006

UDC: 539.213

Card 1/1

ACC NR: AP6033576 SOURCE CODE: UR/0181/66/008/010/3089/3090

AUTHOR: Ditina, Z. Z.; Strakhov, L. P.

ORG: Leningrad State University im. A. A. Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: Paramagnetic centers on the surface of CdSe

SOURCE: Fizika tverdogo tela, v. 8, no. 10, 1966, 3089-3090

TOPIC TAGS: cadmium compound, selenide, microwave spectroscopy, surface property, electron paramagnetic resonance, absorption line

ABSTRACT: The authors report results of an EPR study of the surface of CdSe, using a radiospectrometer (Re-1301) operating at 9300 MHz. To increase the surface, powdered CdSe was crushed in a pestle in air, and the outgassed in $\sim 10^{-6}$ Torr at 450C for several hours, after which the vacuum improved to 10^{-8} torr. Following such a treatment, a broad resonance line was observed at room temperature, with parameters g = 2.0041 and ΔH = 90e. The line increased in amplitude by a factor of several times after cooling to 77K. Additional heating produced a second resonance line (g = 2,003) and ΔH = 20e) superimposed on the first. Heating the povder to 550-600C left the spectrum unchanged, but at 650C both lines disappeared. Oxygen decreased the intensities of the links and eventually caused them to disappear. It is concluded that

Card 1/2

ACC NR: AP6033576

suitable treatment produces in CdSe two types of paramagnetic centers, which lead to the appearance of broad and narrow EPR lines, respectively. The reversible suppression of the spectrum by adsorption of oxygen indicates that these are surface centers. The results agree with those observed by others. The authors thank A. A. Lebedev for suggesting the topic. Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 06Apr66/ ORIG REF: 002/ OTH REF: 005

Card 2/2

STRAKHOV, M.I., inzhener.

Color irregularity in yarn. Tekst.prom. 15 no.12:49 D '55. (MLRA 9:3)

(Yarn)

STRAKHOV, M.I.

Technology of moulinée yarns. Obm. tekh. opyt. [MLP] no.11: 28-36 '56. (MIRA 11:11)
(Yarn) (Dyes and dyeing--Cotton)